

METHOD AND APPARATUS FOR AUTOMATED NATIVE CODE ISOLATION

ABSTRACT

One embodiment of the present invention provides a system that facilitates automated isolation of native code within a computer program that has been compiled to a platform-independent code. The system operates by receiving a library containing a native code sub-routine that provides a service to the computer program. The system analyzes the library to determine the symbol name for the native code sub-routine. A proxy sub-routine is generated for each native code sub-routine exported by the native library that forms a link to the native code sub-routine. This proxy sub-routine is placed into a new library using the original name of the native code sub-routine. The system runs the native code sub-routine in one process, and executes the platform-independent code in a separate process. The system invokes the native code sub-routine in the first process by calling the proxy sub-routine from the platform-independent code in the second process.